CLAIMS

We claim:

1. A method of enhancing a life span of a read/write storage medium, the method comprising the steps of:

identifying whether a file on a read/write storage medium is a static file or a dynamic file;

migrating the file to a dynamic region of the read/write storage medium if the files is a static file; and

migrating the file to a static region of the read/write storage medium if the file is a dynamic file.

2. The method of claim 1, the identifying step comprising the step of:

counting a number of rewrite cycles of the file.

3. The method of claim 2, the identifying step comprising the step of:

comparing the number of rewrite cycles of the file to a predetermined rewrite cycle threshold.

4. The method of claim 3, wherein the predetermined rewrite cycle threshold is associated with a read/write storage medium identifier.

5. The method of claim 3, wherein the predetermined rewrite cycle threshold is associated with a drive identifier for the read/write storage medium.

6. The method of claim 3, wherein the predetermined rewrite cycle threshold is based on self-testing by performing rewrite cycles to a data block of the read/write storage medium until the data block is unstable.

7. The method of claim 3, wherein the predetermined rewrite cycle threshold is stored in a file allocation table.

8. The method of claim 2, wherein the number of rewrite cycles of the file is stored in a file allocation table.

9. The method of claim 1, wherein the read/write storage medium comprises a compact disk read/write disk.

10. The method of claim 1, wherein the read/write storage medium comprises a tape drive.

11. The method of claim 1, wherein the read/write storage medium comprises a floppy disk drive.

12. The method of claim 1, wherein the read/write storage medium comprises an electrically erasable medium.

13. A file system adapted to enhance a life span of a read/write storage medium, the system comprising :

a means for identifying whether a file or a read/write storage medium is a static file or a dynamic file;

a means for migrating the file to a dynamic region of read/write storage medium if the file is a static file; and

a means for migrating the file to a static region of the read/write storage medium if the file is a dynamic file.

14. The file system of claim 13, the means for identifying comprising:

a counter to count a number of rewrite cycles of the file.

15. The file system of claim 14, the means for identifying comprising:

a means for comparing the number of rewrite cycles of the file to a predetermined rewrite cycle threshold.

16. The file access system of claim 13, the means for identifying comprising:

a means for identifying a file type of the file.

17. A computer system adapted for enhancing a life span of a read/write storage medium, the system comprising:

a processor-executable file system adapted to perform the steps of:

identifying whether a file on a read/write storage medium is a static file or a dynamic file;

migrating the file to a dynamic region of the read/write storage medium if the file is a static file; and

migrating the file to a static region of the read/write storage medium if the file is a dynamic file.

18. The computer system of claim 17, the step of identifying comprising a step of:

counting a number of rewrite cycles of the file.

19. The computer system of claim 18, the step of identifying comprising the step of:

comparing the number of rewrite cycles of the file to a predetermined rewrite cycle threshold.

20. A method of enhancing a life span of a read/write storage medium, the method comprising the steps of:

tracking a number of rewrite cycles to a first version of a data region of read/write storage medium;

marking the first version of the data region as unstable if the number of rewrite cycles to the first version of the data region exceeds a predetermined rewrite cycle threshold; and

directing rewrite cycles subsequent to the marking step to a second version of the data region if the number of rewrite cycles to the first version of the data region exceeds the predetermined rewrite cycle threshold.

21. A method of claim 20, further comprising the steps of:

marking the second version of the data region as unstable if a number of rewrite cycles to the second version of the data region as exceeds the predetermined rewrite cycle threshold; and

directing rewrite cycles subsequent to the step of marking the second version of the data region to a third version of the data region.

22. The method of claim 20, wherein the data region comprises a directory.

23. The method of claim 20, wherein the data region comprises a dynamic file.

24. The method of claim 20, wherein the first version of the data region is linked to the second version of the data region.

25. A method of enhancing a life span of a read/write storage medium, the method comprising the steps of:

detecting an available region after a most recently used region on a read/write storage medium in response to a file allocation request for a new file; and

allocating the new file to the available region.

26. The method claim 25, further comprising the step of:

tracking the most recently used region.

27. The method of claim 25, further comprising the steps of:

detecting a static region on the read/write medium; and

overwriting the static region with the new file.